



THE LOW-SKILLED WORKFORCE IN RHODE ISLAND

A Summary of Recent Analyses

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of The Providence Plan

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Sources:

GED Testing Service (GEDTS) of American Council on Education (ACE): www.acenet.edu

U.S. Census Bureau, 2000, Summary File 3

Rhode Island Department of Education, Frequently Requested Education Data (FRED)

Rhode Island Department of Education, Office of Adult Education

Rhode Island Geographic Information System (University of Rhode Island)

Rhode Island Department of Labor and Training

U.S. Department of Labor, Bureau of Labor Statistics

Jobs for the Future, *"Good Things from Small Packages: Finding Common Ground for Workforce Development in Rhode Island"*

John Tyler and Lillian Berk, *"Low-Skilled Workers and the Rhode Island Labor Market: The Role of Education Credentials"*

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About The Providence Plan

The Providence Plan is a private nonprofit organization that works to improve the economic and social well-being of the city and its neighborhoods. Chartered in 1992 by the City of Providence and the State of Rhode Island, ProvPlan collaborates with government agencies, businesses, schools, community groups and residents to address some of the city's most pressing needs.

The Information Group – ProvPlan's original initiative – is at the heart of its efforts to revitalize the capital city. The citywide and statewide information collected and analyzed by this group not only drives all of the decision-making at ProvPlan, but also informs the work of policymakers, service providers, police officers, activists and community leaders.



Executive Summary

In partnership with the Office of Adult Education, John Tyler of Brown University and the Department of Labor and Training, The Providence Plan set out to provide policymakers with a more comprehensive picture of the low-skilled workforce in Rhode Island. This publication is the culmination of this effort and includes the following content:

- ▶ Basic facts and information about the GED;
- ▶ Statistics on GED attainment nationally;
- ▶ Statistics on GED attainment in Rhode Island;
- ▶ A general description of the education level and characteristics of the low-skilled workforce in Rhode Island;
- ▶ Highlights from the research on the labor market conditions for high school dropouts in Rhode Island by John Tyler and Jillian Berk (Brown University);
- ▶ Basic statistics about GED test takers within the prison population.

Findings from this work include the following:

- ▶ A typical GED test taker in Rhode Island does not differ dramatically from his or her counterpart in the rest of the country: most test takers are self-identified as being white English speakers with some high school experience who are taking the test at least in part for educational reasons.
- ▶ Most GED test takers who complete the five-test battery are successful: Between 2002 and 2006, the pass rate among Rhode Island test takers was 83%. There was, however, a sizable gap between the pass rates of white examinees and examinees of color (89% vs. 73%).
- ▶ Rhode Island's workforce has the largest percentage of low-skilled workers (an estimated 25%) of any state in the Northeast. The 2000 Census indicated that Rhode Island has more than 177,000 citizens aged 16 and older who are not enrolled in school and have no high school diploma and/or have limited English proficiency.
- ▶ John Tyler and Jillian Berk found earnings advantages for males who passed the GED test battery compared to those who failed it. However, the 22% earnings gain for passers relative to failers translated into an additional \$393 a quarter on a base of \$1,750. The GED advantage does not appear to propel the passers into economic security.
- ▶ In their study of Rhode Island employers, Tyler and Berk found that employers perceive GED holders to have higher cognitive and non-cognitive skills than non-credentialed dropouts but they perceive high school graduates to have higher cognitive skills (but not non-cognitive skills) than GED holders.
- ▶ In a study of actual employer behavior, Tyler and Berk discovered evidence of discrimination against Hispanic resumes sent out in response to job advertisements in *The Providence Journal*. Although the findings were statistically significant, the authors suggest caution in drawing inferences from the results because of the limited scope of the study.

About this Document

The original intent of the project that culminated in this document was to work with the databases of various state agencies to determine the size and characteristics of the "low-skilled workforce" in Rhode Island. Due to funding constraints and the large scope of that venture, we have started with a smaller study on the impact of the GED on earnings. Although GED test takers represent only a portion of the low-skilled workforce, their numbers are significant enough to make this investigation a valuable place to begin the broader study originally planned.

By linking wage data from The Department of Labor and Training to GED test taker data from the Rhode Island Department of Education's Office of Adult Education, The Providence Plan and its partners were able to describe the general composition and distribution of Rhode Island GED test takers and their labor market outcomes during the first part of this decade. Our hope is that this publication will inform policy-makers interested in workforce development.

This work also represents the first step by The Providence Plan to explore the potential benefits of linking state agency databases. We hope this study demonstrates the utility of linking databases to create rich datasets that inform day-to-day operations and answer specific policy questions.

BASIC FACTS ABOUT THE GED TESTS

The first GED Tests were developed in 1942 to help World War II veterans finish their studies and re-enter civilian life. Civilians first had the opportunity to take the GED Tests in 1947 in New York. Today, the nonprofit GED Testing Program in Rhode Island is jointly administered by the GED Testing Service of the American Council on Education (GEDTS), the Rhode Island Department of Education, and the testing centers authorized by the Board of Regents for Elementary and Secondary Education. The GED tests provide adults age 16 and over the opportunity to demonstrate academic subject matter knowledge and skills associated with high school completion.

The 2002 series GED Tests include five subject area tests: language arts/writing; social studies; science; language arts/reading; and mathematics. The test battery lasts for seven hours and each of the five tests is reported separately on a standard score scale ranging from 200 to 800. Beginning with the 2002 Series GED Tests, the minimum passing standard set by the GED Testing Service is an average of the five individual tests of 450 or higher (a total score of 2250 or higher), and a minimum score of 410 or better on each individual test. These passing score cutoffs are based on the performance of traditional graduating high school seniors; passing scores are equal to or above those earned by 40 percent of graduating high school seniors.

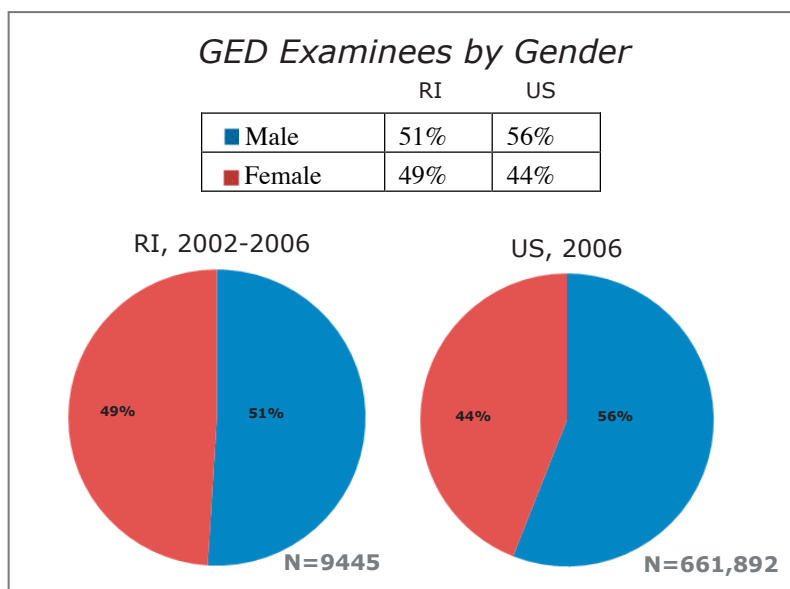
SUMMARY STATISTICS

Project background: As part of our effort to better understand the low-skilled workforce in Rhode Island, The Providence Plan's Information Group analyzed data from a demographic survey distributed to examinees by the GEDTS in the pre-registration process. These data are linked to testing data and were provided by the Rhode Island Department of Education's Office of Adult Education. The following statistics summarize the basic demographic information from examinees between 2002 and 2006 in Rhode Island and, where possible, include comparisons with national GED data for 2006.¹ In general, demographic trends at the national level did not change between 2002 and 2006.

Gender

Between 2002 and 2006, the percentage of male and female GED candidates in Rhode Island was more proportional to the adult population than the national composition of GED candidates. While the breakdown between male and female GED test takers in Rhode Island was approximately 51% to 49%, GED test takers across the U.S. were more likely to be male than female (56% to 44%).

Table & Charts: GED Examinees by Gender (Rhode Island, 2002-2006 & U.S., 2006). Source: RIDE Office of Adult Education, analysis by The Providence Plan.



Ethnicity

GED test takers in Rhode Island were more likely to describe themselves as white than any other race or ethnicity. When recent dropout rates in Rhode Island are taken into consideration, white test takers are overrepresented compared to minority groups.²

GED Examinees by Race/Ethnicity

	RI	US
■ White	64%	54%
■ Hispanic origin or descent	16%	19%
■ Black, African American, African descent	14%	23%
■ Asian	3%	2%
■ American Indian or Alaska Native	3%	3%
■ Native Hawaiian or Pacific Islander	0%	1%

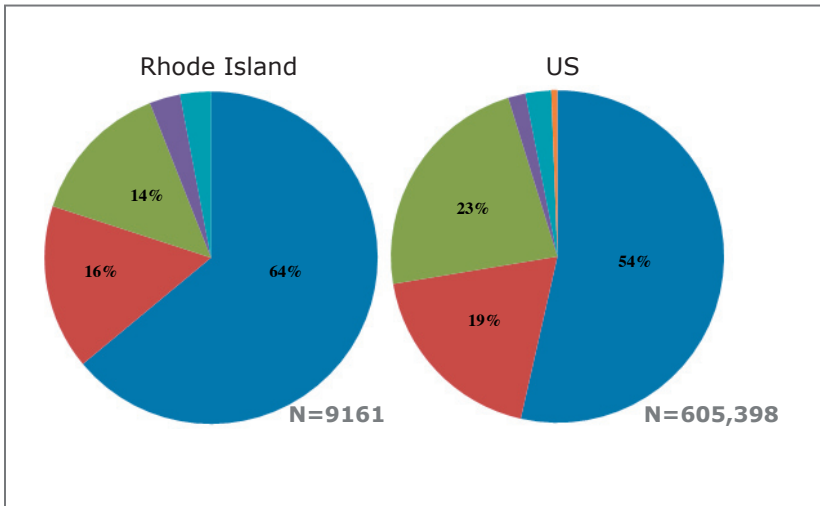


Table & Charts: GED Examinees by Race/Ethnicity (RI 2002-2006, U.S. 2006). Source: RIDE Office of Adult Education, analysis by The Providence Plan.

Primary Language

The vast majority of Rhode Island examinees between 2002 and 2006 reported their primary language as English. However, almost 1 in 10 (9%) reported a primary language other than English. The majority of these were Spanish speakers.

Primary Language of RI GED Examinees, 2002-2006

■ English	91.0%
■ Spanish	5.0%
■ Other	3.5%
■ French	0.5%
Total	100.0%

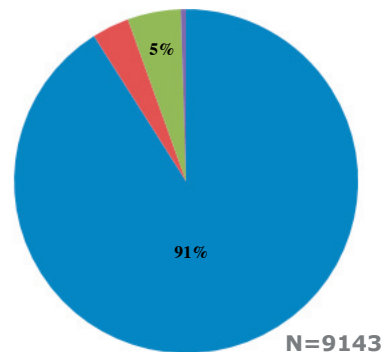


Table and Chart: Primary Language of RI GED Examinees, 2002-2006. Source: RIDE Office of Adult Education, analysis by The Providence Plan.

Highest Level of Education Completed

Most GED examinees come to the test with some high school experience. Slightly less than a third of Rhode Island test takers report having completed their junior year in high school, and an additional third report having completed their sophomore year. Rhode Island GED test takers do not differ substantially in the highest level of education completed from GED test takers nationally.

Highest Level of Education Completed by all GED Examinees (Rhode Island vs. United States)

	■ Rhode Island (2002-2006)	■ U.S. (2006)
Grade 8 or less	13%	11%
Grade 9	22%	19%
Grade 10	31%	29%
Grade 11	30%	34%
Grade 12	4%	7%

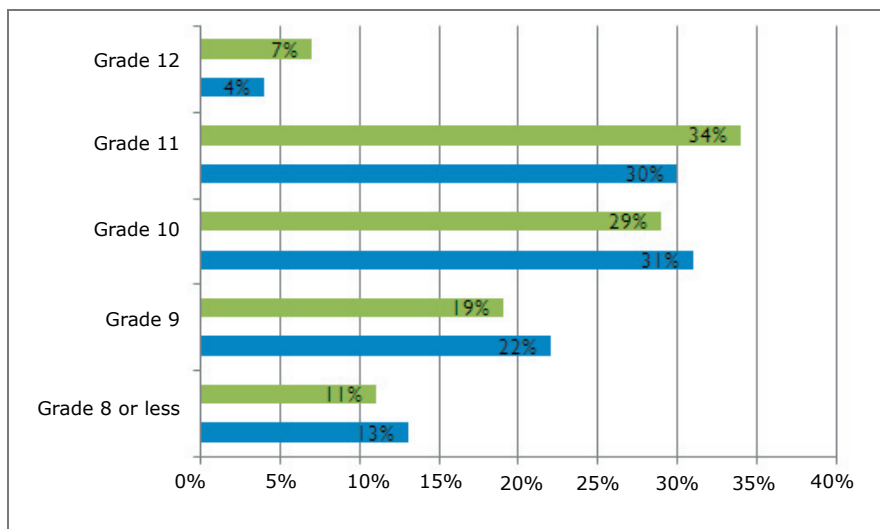


Table & Chart: Highest Level of Education Completed by all GED Examinees (Rhode Island vs. United States). Source: RIDE Office of Adult Education, analysis by The Providence Plan.

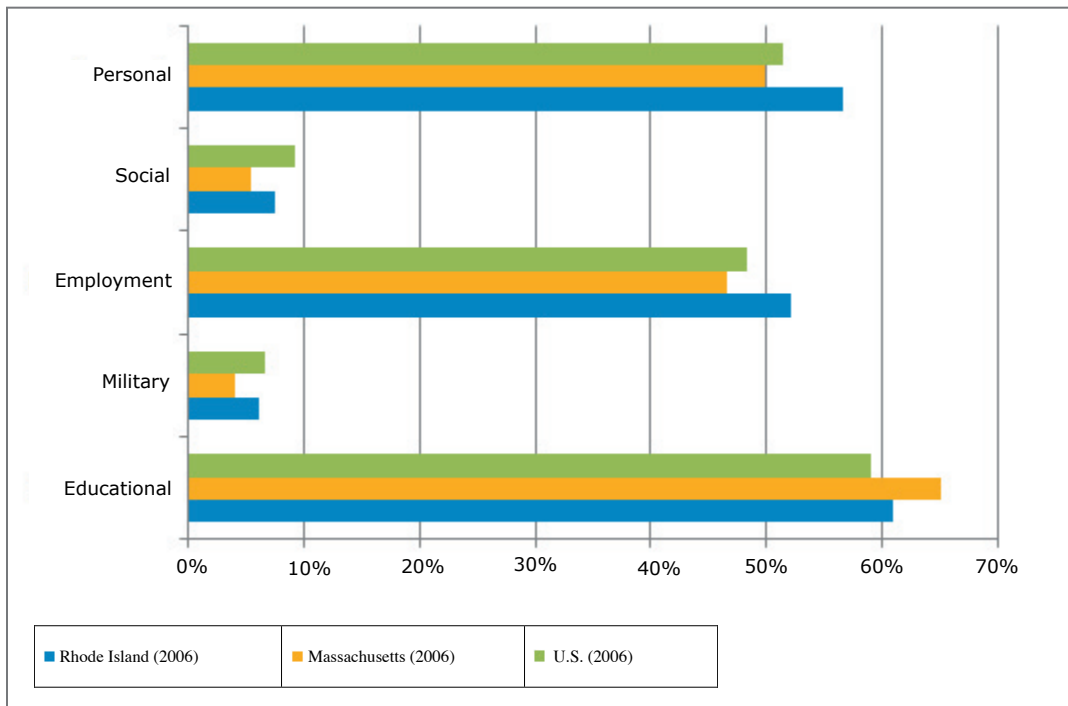
Reasons for Testing

Among reasons given for attempting the GED test battery in 2006, educational reasons (i.e. entering a two- or four-year college/university, job training,

	■ Rhode Island (2006)	■ Massachusetts (2006)	■ U.S. (2006)
Educational	61%	65%	59%
Military	6%	4%	7%
Employment	52%	47%	48%
Social	7%	5%	9%
Personal	57%	50%	51%

enrolling in a technical or trade program) were the most common: 61% cited at least one educational reason. Personal reasons (i.e. becoming a positive role model for family, personal satisfaction) and employment (i.e. getting first or better job, employer requirement) were also common, with at least half of examinees citing at least one from each category. Rhode Island test takers did not cite reasons dramatically different from GED examinees in the rest of the country or in Massachusetts.

Reasons for Testing (Cont'd)



Source for table and chart: RIDE Office of Adult Education, analysis by The Providence Plan.

Test Preparation

Rhode Island GED test takers who completed the test battery were likely to have taken an official practice test as part of their preparation. Among those who completed the battery, 78% reported taking an official practice test. Of these, 84% passed and 16% did not. However, the pass rate among test takers who did not take an official practice test but completed the full test battery was not much different; 79% passed without taking an official practice test.

Pass Rates of RI GED Test Battery Completers by Test Preparation

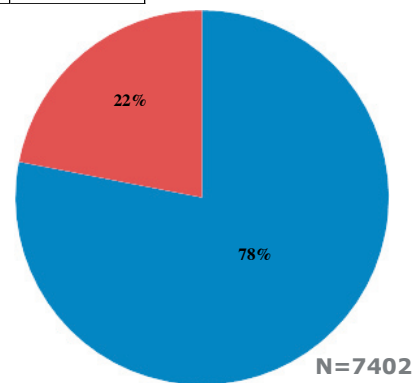
Among GED test battery completers (2002-2006)

	Passed	Failed
Took practice test	84%	16%
Did not take practice test	79%	21%

N=7402

Percent of RI GED Test Battery Completers who Took Official Practice Test, 2002-2006

Yes	78%
No	22%



Source for table and chart: RIDE Office of Adult Education, analysis by The Providence Plan.

Test Success

Between 2002 and 2006, the pass rate among GED examinees who completed the five-test battery was 83%. There is a sizable gap between the test performance of white and minorities. White examinees were much more likely to pass than minorities (89% vs. 73%). Among all test takers, whites were much more likely to complete the test battery than minorities (88% vs. 71%). African-American and Hispanic examinees were the least likely to complete the test battery, with nearly 1 in 3 not finishing all five tests (70% completion rate).

Percent of RI GED Test Battery Completers who Passed by Race/Ethnicity, 2002-2006

White	89%
Hispanic origin or descent	74%
Black, African American, African descent	70%
Asian	75%
American Indian or Alaska Native	78%
Native Hawaiian or Pacific Islander	75%

Source: RIDE Office of Adult Education, analysis by The Providence Plan.

N=7402

The Adult Correctional Institute

The Providence Plan analyzed data from GED test takers whose address and Test Center indicated they attempted the test while serving time at the Adult Correctional Institute. There were 794 individuals who attempted the test at least one time between 2002 and 2005.

- ▶ Whites comprised 44%, African-Americans comprised 26%, and Hispanics comprised 21%.
- ▶ Nine in ten ACI GED test takers were male (91%).
- ▶ The vast majority listed their primary language as English (95%).
- ▶ More than one in five reported their highest completed level of education was 8th grade or less (21%).
- ▶ Just over half of GED attempters completed the five-test battery by the end of 2005 (51%). Of these, 73% passed and received their GED.

Source: Rhode Island Department of Education, Office of Adult Education

Endnotes for “Summary Statistics”

¹National GED Examinee data retrieved from “2006 GED Testing Program Statistical Report” GEDTS, ACE.

²RIDE FRED, 2005-2006. Accessed online 24 November 2008.

THE LOW-SKILLED WORKFORCE IN RHODE ISLAND

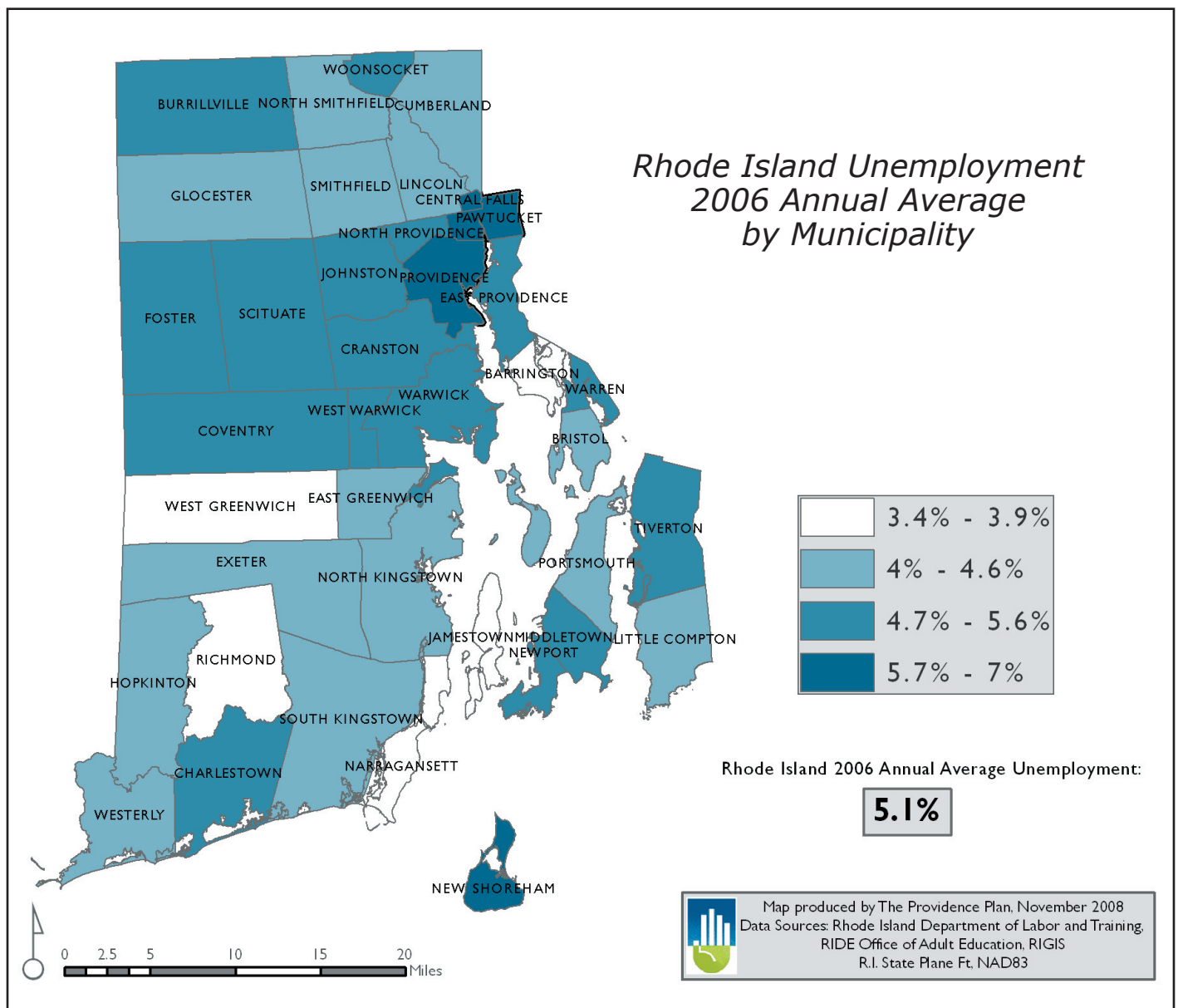
Low-skilled workers face an unkind labor market. With limited education, training, and math and literacy skills, this subset of the labor market is not adequately prepared to succeed in the current employment market.

In Rhode Island, the opportunities for low-skilled workers are particularly limited. With Rhode Island having among the highest unemployment rates in the country¹, job opportunities, especially in the labor

and manufacturing sector, are nearly non-existent, leaving low-skilled workers with very few employment options.²

The majority of low-skilled workers lack the educational foundation needed for success in Rhode Island's labor market. The 2000 Census indicated that Rhode Island has more than 177,000 citizens aged 16 and older who are not enrolled in school and have

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The Low-Skilled Workforce in RI

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no high school diploma and/or have limited English proficiency. This group makes up 25% of the Rhode Island workforce.

Although the supply of low-skilled workers has declined at the national level since the early 1970s³, Rhode Island ranks 38th in the percentage of adults with a high school diploma and ranks last in the Northeast. This translates into a larger low-skill workforce compared to the U.S. generally⁴ and can be attributed to the growth of a low-skill immigrant population. Rhode Island's foreign-born population generally has a

lower education level than other residents.⁵

The demand in Rhode Island is primarily for middle-skill workers, or those who have completed a technical or college program and have good “soft skills” – teamwork, critical thinking, communication – as well as “hard skills.” This has created a worker shortage for employers and a skills gap among workers.⁶ Closing these gaps is critical for Rhode Island's economic development, as well as for improving the quality of life of its residents.

Endnotes for “Low-Skilled Workforce in RI”

¹The October seasonally adjusted unemployment rate for Rhode Island was 9.3%, which tied with Michigan for highest in the U.S. U.S. Dept of Labor, Bureau of Labor Statistics.

²In the Rhode Island workforce 25% of workers are considered low-skill laborers. When comparing the number of low-skill laborers with the number of jobs available for this particular job sector, there is a 4% deficit in the number of jobs available. Rhode Island Department of Labor and Training & US Bureau of the Census.

³<http://www.dol.gov/oasam/programs/history/herman/reports/futurework/conference/trends/trendsVII.htm>

⁴<http://www.jff.org/Documents/GoodThings.Summ.pdf>

⁵U.S. Census Bureau, American Community Survey (2005-2007)

⁶Workforce Alliance, “Growing Rhode Island's Economy by Investing in the Forgotten Middle.” <http://www.worforcealliance.org>

WAGE STUDY BY TYLER AND BERK

It has long been established that GED holders don't fare as well as regular high school graduates. Economist James Heckman and his co-author Steve Cameron demonstrated in a paper published in the *Journal of Labor Economics* in 1993 that in terms of labor market outcomes, GED holders fare far worse than those with a traditional diploma.

Most subsequent research, however, has compared dropouts who obtain the credential with dropouts who don't, not with regular high school graduates. For most economists, the real measure of the GED's value is the impact the credential has on earnings and employment.

Economists have questioned what mechanisms may play a part in the GED's impact on labor market outcomes. One potential mechanism is human capital accumulation. In other words, the desire to pass the GED exams leads dropouts to increase their math and literacy skills, which, in turn, are rewarded in the labor market.

A second possible mechanism is labor market "signaling." Under this scenario, a job applicant who holds a GED "signals" to a potential employer that he or she will be more productive than the candidate who doesn't have the credential.

With a subset of the data that was also analyzed by The Providence Plan, John H. Tyler and Jillian Berk analyzed labor market outcomes of about 2,700 individuals who last tested for the GED in 2002 and 2003. They compared the labor market outcomes of individuals who passed the GED with those who attempted but failed the GED exams. Here are some highlights of their findings:

► GED passers are more likely to be white, native English speakers and slightly younger than GED failers.

► Earnings of most GED candidates, regardless of pass/fail status, tend to increase over time.

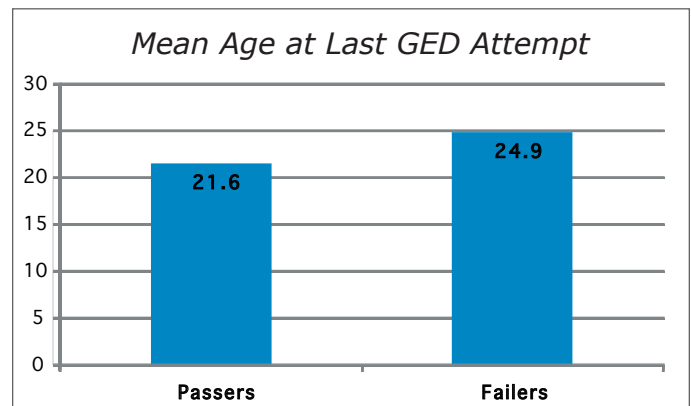
► Among GED candidates, non-Hispanic whites are overrepresented compared to Hispanics and blacks when considering the dropout rates of the different groups.

► Individuals who enter the R.I. labor market with a GED earn more over time than those who failed the GED exams.

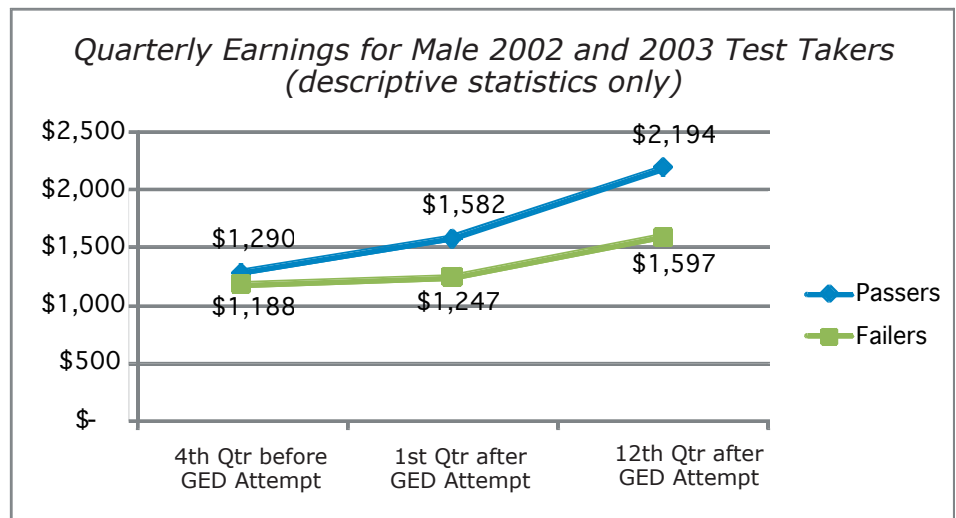
► Earnings gains for GED holders tend to be delayed; it is only in the third year after receiving the credential that passers earned statistically significant higher incomes than failers.

► The earnings of male GED recipients in the third

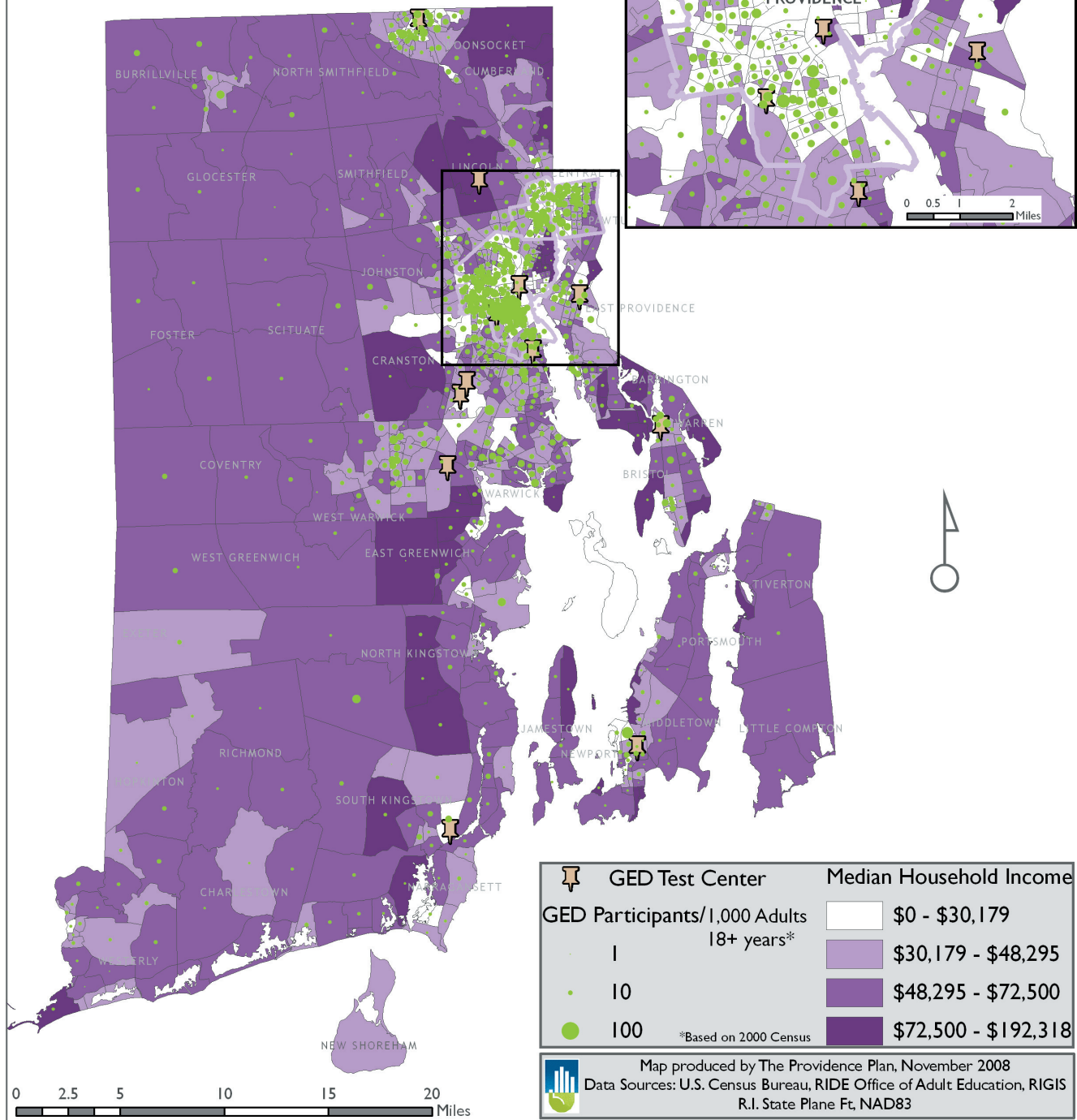
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Source for both charts: "Low-Skilled Workers and the Rhode Island Labor Market: The Role of Education Credentials." (Tyler and Berk)



GED Program Participant Density (2002-2006) with Median Household Income (2000 Census) by Block Group



WAGE STUDY

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year following the test were 22% higher than males who attempted but failed the GED. This may seem a large economic difference, but given that the mean quarterly

earnings for the male non-passers in the third year after the GED attempt was just \$1,750, it is dubious how substantive this earnings advantage is.

RHODE ISLAND EMPLOYER SURVEY

In the spring and summer of 2007, Tyler and Berk, along with the Labor Market Information Office of the Department of Labor and Training and researchers from Brown University, surveyed a random sample of 2,000 firms that employ at least 10 full-time employees in Rhode Island. The researchers were primarily concerned with determining what skills were valued by employers for jobs that did not require a college education, and learning what education credentials signaled to employers about the productivity potential of applicants.

The researchers received a response rate of over 40%. Here are some highlights of their findings:

- ▶ 50% of employers required a high school degree

but 93% would accept a GED as a substitute. Employers were more likely to require work experience than to require a high school degree.

▶ Employers are more likely to require a basic skills test than a diploma or GED as part of the hiring process, but the most common hiring requirement is a criminal background check (53%).

▶ Employers perceive greater differences between GED holders and high school graduates in cognitive skills and fewer differences in non-cognitive skills, such as teamwork and positive work attitude. Employers perceive GED holders to have higher cognitive and non-cognitive skills than non-credentialed dropouts.

RHODE ISLAND AUDIT STUDY

Tyler and Berk expanded their study of the labor market for GED holders to address the potential disconnect between self-reports (based on the Employer Survey) and actual behavior of employers. The researchers created hypothetical job applicants and sent resumes in response to advertisements in *The Providence Journal*. They chose advertisements for jobs that did not appear to require any college and appeared suitable for entry-level applicants.

Between June and November of 2006, they submitted over 1,000 resumes to 251 non-college worker job openings. Resumes varied by gender, ethnicity and education but were otherwise identical. Tyler and Berk hoped to gauge the level of employer interest in the constructed resumes, as indicated by employer call back. Below are some highlights of their findings:

▶ The call-back rate for resumes posted to advertisements for administrative entry-level jobs was just 0.5%.

▶ Employers did not call high school graduates back significantly more often than they called GED holders.

▶ There was evidence of discrimination against resumes with Hispanic last names: 5.4% of the resumes with non-Hispanic last names received a call back versus only 3.2% of the resumes with Hispanic last names, a difference that is statistically significant.

Interestingly, this difference disappears when the Hispanic and non-Hispanic resumes both indicate that the job applicant holds a traditional high school diploma. The authors suggest caution in drawing inferences from the results because of the low call-back rate generated by the constructed resumes and because the nature of the study precluded applying for jobs in areas such as construction and food services – areas that traditionally employ large numbers of entry-level and low-skilled workers and jobs that almost always require an application in person.

